

PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT



(PCT Article 36 and Rule 70)

Applicant's or agent's file reference TS 1318 PCT	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP 03/50722	International filing date (day/month/year) 16.10.2003	Priority date (day/month/year) 16.10.2002
International Patent Classification (IPC) or both national classification and IPC B65G53/22		
Applicant SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.
 - ☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 3 sheets.

3. This report contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application

Date of submission of the demand 06.05.2004	Date of completion of this report 15.10.2004
Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer Papatheofrastou, M Telephone No. +31 70 340-4422 

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/EP 03/50722**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-8 as originally filed

Claims, Numbers

1-15 received on 02.09.2004 with letter of 02.09.2004

Drawings, Sheets

1/3-3/3 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY
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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	4,7,11
	No: Claims	1-3,5,6,8-10,12-15
Inventive step (IS)	Yes: Claims	4,7
	No: Claims	1-3,5,6,8-15
Industrial applicability (IA)	Yes: Claims	1-15
	No: Claims	

2. Citations and explanations

see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/EP 03/50722

Re Item V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

2.1 Reference is made to the following documents:

D1: BE-A-881146 (HOOL VAN) 15 July 1980 (1980-07-15)

D2: US-A-4413758 (WALTERS ARMON J) 8 November 1983 (1983-11-08)

2.2 The subject-matter of independent claims 1, 8, 12 is not new in the sense of Article 33(2) PCT.

2.3 The document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and discloses (the references in parentheses applying to this document):

A vessel for storing particulate matter, comprising a main part (14) and, at its bottom portion, at least one discharge device (1), which comprises a converging outer shell (2) and a permeable, converging inner shell (6) positioned in the outer shell (2), the discharge device (1) being connected to the main part (14) by means of a first flange (13) near the lower rim of the bottom portion of the main part (14) and a second flange (3) near the upper rim of the outer shell (2), whereby the inner shell (6) is secured at or near its upper rim to the inner wall of the outer shell (2) of the discharge device (1).

All technical features of claim 1 are known from D1.

2.4 Document D1 also discloses (the references in parentheses applying to this document):

A vessel for storing particulate matter, comprising a main part (14) and, at its bottom portion, at least one discharge device (1), which comprises a converging outer shell (2) and a permeable, converging inner shell (6) positioned in the outer shell (2), the discharge device (1) being connected to the main part (14) by means of a first flange (13) near the lower rim of the bottom portion of the main part (14) and a second flange (3) near the upper rim of the outer shell (2), whereby the outer shell (2) comprises, at its bottom portion, a third flange (4) and whereby the lower portion (9) of the inner shell (6) is cylindrical and positioned in line with the

central opening of the third flange (4) and extends through this opening.

All technical features of claim 8 are known from D1.

- 2.5 Document D1 also discloses (the references in parentheses applying to this document):

A discharge device (1) for use in a vessel for storing particulate matter, comprising a converging outer shell (2) and a permeable, converging inner shell (6) positioned in the outer shell (2), wherein the inner shell (6) is secured at or near its upper rim to the inner wall of the outer shell (2).

All technical features of claim 12 are known from D1.

- 2.6 Dependent claims 2,3,5,6,9-11,13-15 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step, the reasons being as follows:

Document D1 discloses in page 4, line 13 to page 8, line 21, figures 1-4, the features of claims 2,3,5,6,9,10,13-15.

The features of claim 11 are described in document D2 as providing the same advantages as in the present application. The skilled person would therefore regard it as a normal option to include these features in the vessel described in document D1. Thus, the subject-matter of claim 10 does not involve an inventive step and does not satisfy the criterion set forth in Article 33(3) PCT.

- 2.7 The requirements of Rule 6.4 PCT are not fulfilled by the present application as multiple dependent claims serve as a basis for other multiple dependent claims.